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APPLICANT Donald L. Schilling

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### **U.S. PATENT DOCUMENTS**

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Fa	AA*	3	8	3	1	0	1	3	8/74	Alsup et al.				
40	AB*	3	8	3	8	3	4	2	9/74	Bjorkman				
4/	AC*	3	9	0	0	7	2	1	8/75	Speiser et al.				
8	AD*	4	1	1	2	3	7	2	9/78	Holmes et al.			Technology :	<u>د.</u>
16	AE*	4	1	8	9	6	7	7	2/80	Cooper et al.			olog	<u>8</u> 70
90	AF*	4	1	9	3	0	3	1	3/80 -	Cooper			/ Center	7
W	AG*	4	2	2	2	1	1	5	9/80	Cooper et al.			iter 2	2001
4	AH*	4	2	3	8	8	5	0	12/80	Vance			2600	
8	AI*	4	2	4	7	9	4	2	1/81	Hauer				
46	AJ*	4	2	8	5	0	6	0	8/81	Cobb et al.				
4	AK*	4	3	9	2	2	3	2	7/83	Andren et al.				
15	AL*	4	4	1	8	3	9	3	11/83	Zscheile, Jr.				

### FOREIGN PATENT DOCUMENTS

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AM*	2	2	2	9	6	0	9	9/90	Great Britain				
AN*	9	1	0	7	0	3	7		PCT				

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

AO*	Fluhr, Z.C. and Porter, P.T., "Advanced Mobile Phone Service: Control Architecture", The Bell system Technical Journal (Jan. 1979), Vol. 58, No. 1, pp. 43-69.

**EXAMINER** 

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4	AP*	4	4	1	8	4	2	5	11/83	Fennel, Jr. et al.			_
4	AQ*	4	4	2	5	6	4	2	1/84	Moses et al.			
9	AR*	4	4	5	5	6	5	1	6/84	Baran			
4	AS*	4	4	7	9	2	2	6	10/84	Prabhu et al.			
90	AT*	4	4	8	4	3	3	5	11/84	Mosley et al.			Te
26	AU*	4	5	1	2	0	1	3	4/85	Nash et al.			JU chno
1	AV*	4	5	2	3	3	1	1	6/85	Lee et al.			JUL 2 Technology
9/1	AW*	4	5	3	8	2	8	0	8/85	Mosley, Jr. et al.			
7	AX*	4	5	5	3	1	3	0	11/85	Kato			7 3001 Center 2500
4	AY*	4	5	6	3	7	7	4	1/86	Gloge			600
4	AZ*	4	6	0	6	0	3	9	8/96	Nicolas et al.			
U	BA*	4	6	1	2	6	3	7	9/86	Davis et al.			

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	BB*	8 6 0 0 4 8 6					8	6		PCT				
•	BC*	0	2	6	5	1	7	8	4/88	Europe				

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

BD	)*	DeGaudenzi, R. and Viola, R., "A Novel Code Division Multiple Access System for High Capacity Mobile Communications Satellites", ESA Journal (1989), Vol. 13, pp. 303-322.
BE	*	Stiffler, J.J., Theory of Synchronous Communications (Prentice-Hall, Inc., New Jersey), table of contents listing.

**EXAMINER** 

DATE CONSIDERED

## RECEIVED

JUL 2 3 2001 00 P

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Ø	BF*	4	6	2	1	3	6	5	11/86	Chiu				
If	BG*	4	6	3	9	9	1	4	1/87	Winters				
U	BH*	4	6	4	1	3	2	2	2/87 -	Hasegawa		i		
43	BI*	4	6	4	7	8	6	3	3/87	Skudera, Jr. et al.				
4	BJ*	4	6	4	9	5	4	9	3/87	Halpern et al.			echnology	_
4	BK*	4	6	5	3	0	6	9	3/87	Roeder			nolog	三
4	BL*	4	6	6	0	1	6	4	4/87	Leibowitz			Ce	<u>₹</u>
El	BM*	4	6	7	2	6	0	5	6/87	Hustig et al.			Center	 
1	BN*	4	6	7	2	6	2	9	6/87	Beier			2600	
a	BO*	4	6	7	2	6	5	8	6/87	Kavehrad et al.				
4	BP*	4	6	7	5	8	3	9	6/87	Kerr				
4	BQ*	4	6	8	0	7	8	5	7/87	Akiyama et al.				

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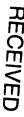
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BS*	0	3	9	2	0	79	A2	10/90	EPO					

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

 вт*	Scholtz, Robert A., "The Origins of Spread-Spectrum Communications", IEEE Transactions on Communications (May 1982), Vol. Com. 30, No. 5; pp. 822-855.
 BU*	Nettleton, Raymond W., Spectral Efficiency in Cellular Land-Mobile Communications: A Spread-Spectrum Approach (1978) (unpublished Ph.D. Dissertation, Purdue University.

**EXAMINER** 

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### **FORM PTO-1449**

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4	BV*	4	6	9	1	3	2	6	9/87	Tsuchiya			
91	BW*	4	6	9	7	2	6	0	9/87	Grauel et al.			
91	BX*	4	7	0	3	4	7	4	10/87	Foschini et al.			
4	BY*	4	7	0	7	8	3	9	11/87	Andren et al.			
4	BZ*	4	7	1	8	0	8	0	1/88	Serrano et al.			Te
J <sub>f</sub>	CA*	4	7	3	0	3	4	0	3/88	Frazier, Jr.			chno
	CB*	4	7	4	2	5	1	2	5/88	Akashi et al.			nology
	CC*	4	7	5	5	9	8	3	7/88	Masak et al.			ලි -
4	CD*	4	7	5	9	0	3	4	7/88	Nagazumi			(UU)
90	CE*	4	7	7	5	9	9	5	10/88	Chapman et al.			600
1	CF*	4	7	8	9	9	8	3	12/88	Acampora et al.			
- G	CG*	4	7	9	9	2	5	3	1/89	Stern et al.			
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### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CH*	Cooper, George R. and Nettleton, Ray, W., "Cellular Mobile Technology: The Great Multiplier," IEEE Spectrum, June 1983, pp. 30-37.
CI*	Blasbalg, H., "A Comparison of Pseudo-Noise and Conventional Modulation for Multiple-Access Satellite Communications," IBM Journal of Research Development, Vol. 9, No. 4, Jul. 1965, pp. 241-255.
CJ*	Salmas; et al., "On the System Design Aspects of Code Division Multiple Access (CDMA) Applied to Digital Cellular and Personal Communication Networks" IEEE Vehicle Technology Conference, 19-22 May 1991, pages 57-62

**EXAMINER** 

DATE CONSIDERED

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8	CK*	4	8	0	5	2	0	8	2/89	Schwartz			
91	CL*	4	8	0	7	2	2	2	2/89	Amitay			
	CM*	4	8	1	1	4	2	1	<b>-</b> 3/89	Havel et al.			
4	CN*	4	8	3	7	8	0	2	6/89	Higashiyama et al.			=
91	CO*	4	8	4	3	6	1	2	6/89	Brusch et al.			Techn
4	CP*	4	8	5	0	0	3	6	7/89	Smith			blogy
W	CQ*	4	8	6	0	3	0	7	8/89	Nakayama			; 7 Cer
W	CR*	4	8	6	6	7	3	2	9/89	Carey et al.			7  200  Center 2600
	CS*	4	8	9	4	8	4	2	1/90	Broekhoven et al.			600
8	CT*	4	8	9	9	3	6	4	2/90	Akazawa et al.			
- Al	CU*	4	9	0	1	3	0	7	2/90	Gilhousen et al.			
9	-CV*	4	9	1	4	6	5	1	4/90	Lusignan	<u> </u>		

### FOREIGN PATENT DOCUMENTS

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DOCUMENT NUMBER								DATE	COUNTRY	CLASS	SUBCLASS	YES	NO	

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

CW*	Dixon, Robert C., Spread Spectrum Systems (John Wiley & Sons, Inc.: New York, 3d ed. 1994), pp. 412-413.
CX*	The International Dictionary of Physics and Electronics (D. Van Nostrand Co.: Princeton, NJ, 2d ed. 1961), pp. 612, 952.

**EXAMINER** 

DATE CONSIDERED

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9/	CY*	4	9	2	2	5	0	6	5/90	McCallister et al.			
7/	CZ*	4	9	3	0	1	4	0	5/90	Cripps et al.			
9/	DA*	4	9	3	2	0	3	7	6/90	Simpson et al.			
Th	DB*	4	9	5	8	3	5	9	9/90	Kato			
4	·DC*	4	9	6	9	1	5	9	11/90	Belcher et al.			Technology Ce
9/	DD*	4	9	7	7	5	7	7	12/90	Arthur et al.			nolog
4	DE*	4	9	7	7	5	7	8	12/90	Ishigaki et al.			2 7 Jy Ce
W	DF*	4	9	9	1	1	6	4	2/91	Casiraghi et al.			2001 Inter 2600
C	DG*	4	9	9	3	0	2	1	2/91	Nannicini et al.			)1 260(
1	DH*	5	0	0	5	1	6	9	4/91	Bronder et al.			)
96	DI*	5	0	1	6	2	5	5	5/91	Dixon et al.			
7/	DJ*	5	0	1	6	2	5	6	5/91	Stewart			

### FOREIGN PATENT DOCUMENTS

					TRANS	SLATION
DOCUME	NT NUMBER DATE	COUNTRY	CLASS	SUBCLASS		NO

### OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

DK*	Robinson, Vester, Solid-State Circuit Analysis (Reston Publishing Co.: Reston, VA, 1975), pp. 309-314.
`	
DL*	Alavi, Hossein, Power Control and Interference Management in a Spread-Spectrum Cellular Mobile Radio System (1984) (Unpublished Ph.D. Dissertation, Michigan State University).

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B	DM*	5	0	2	2	0	4	7	6/91	Dixon et al.					
V	DN*	5	0	2	3	8	8	7	6/91	Takeuchi et al.					
4	DO*	5	0	2	9	1	8	1	7/91	Endo et al.					
41	DP*	5	0	4	0	2	3	8	8/91	Comroe et al.			ā	<u> </u>	
7	DQ*	5	0	4	8	0	5	2	9/91	Hamatsu et al.			21	ے	
16	DR*	5	0	5	6	1	0	9	10/91	Gilhousen et al.			· · · · · · · · · · · · · · · · · · ·	UL 2	
91	DS*	5	0	7	3	9	0	0	12/91	Mallinckrodt			Cen	7	
1	DT*	5	0	8	6	5	0	8	2/92	Furuno			er 2	001	
2	DU*	5	0	9	3	8	4	0	- 3/92	Schilling			300		
-K	DV*	5	1	0	1	5	0	1	3/92	Gilhousen et al.			_		
4	DW*	5	1	0	3	4	5	9	4/92	Gilhousen et al.					
7	DX*	5	1	0	9	3	9	0	4/92	Gilhousen et al.					
U	DY*	5	1	2	9	0	9	8	7/92	McGirr et al.					
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	DZ*		M.B. Pursley, "Performance Evaluation for Phase-Coded Spread-Spectrum Multiple-Access Communication - Part I: System Analysis", IEEE Transactions on Communications, Com-25, No. 8, August, 1997.												
	EA*								ror Probabil	Accurate Method To Calculities", IEEE Transactions of O, No. 3, March 1992.				ol.	

### RECEIVED

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C)	EC*	5	2	6	5	1	1	9	11/93	Gilhousen et al.				
9	ED*	5	2	6	7	2	6	2	11/93	Wheatley III		-	Te	
95	EF*	5	2	တ	9	2	2	6	3/94	Schilling			echndlogy	卢
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9	EH*	5	3	8	6	5	8	8	1/95	Yasuda			Center 2600	
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	EJ*		7	Orm	ond	royc	i, R.	F., '	"Power Con	trol for Spread-Spectrum S	Systems	," Confe	rence	on
				. (	Com	ımu	nica	tion	s Equipmer	nt and Systems, 20-22, Apr	ril 1982,	pp. 109-	115.	
				+										
	EK*	'	_	М	unda	ay &	Pir	che	s, "Jaguar-	V Frequency-Hopping Rad 29 (1982), June, No. 3, Pa	io Syste	m," 8049	IEEE	
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